

Title (en)

Method of using and reconstructing a film-cooling augmentation device for a turbine airfoil

Title (de)

Verfahren zur Verwendung und Rekonstruktion einer Vorrichtung zur Steigerung der Filmkühlung für eine Turbinenschaufel

Title (fr)

Procédé d'utilisation et de reconstruction d'un dispositif d'augmentation de refroidissement à film d'air pour une aube de turbine

Publication

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Application

EP 10156151 A 20100311

Priority

US 40634309 A 20090318

Abstract (en)

A method (200) of using a film-cooling insert for a turbine airfoil (12) is disclosed. The method (200) includes forming an airfoil sidewall (18) having a film-cooling hole (30) that extends between an airfoil cooling circuit (24) and an airfoil surface (21). The method (200) also includes forming a film-cooling insert (220) and disposing the film-cooling insert (230) in the film-cooling hole (30). A method (300) of reconstructing a film-cooling insert for a turbine airfoil (12) is also disclosed. The method (230) includes removing a remnant of a film-cooling insert (310) from a film-cooling hole (30) of a turbine airfoil (12). The method (230) also includes disposing a second film-cooling insert (320) in the film-cooling hole (30).

IPC 8 full level

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CPC (source: EP US)

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Cited by

EP2826955A1; FR3144768A1; FR3026039A1; EP3351730A1; EP4253722A1; US10619499B2; US11448087B2; US11162370B2; EP2829352A3; EP3795802A1; WO2016042233A1; WO2017222920A1; US11739646B1; US9765623B2

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